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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1 - 20. (Cancelled)

21. (New) A method comprising:

depositing a layer on a substrate;

depositing a non-chemically amplified photoresist layer upon the layer, the non-chemically amplified photoresist layer having a developer-soluble resin and a photoactive compound, the photoactive compound inhibiting solubility of the developer-soluble resin;

exposing selected portions of the non-chemically amplified photoresist layer to an extreme ultra-violet light source such that solubility of the selected portions of the non-chemically amplified photoresist layer is promoted; and

developing the exposed portions of the non-chemically amplified photoresist layer.

22. (New) The method of claim 21, wherein the developer-soluble resin comprises a polyhydroxystyrene-based compound.

23. (New) The method of claim 22, wherein the photoactive compound comprises a phenyl group.

24. (New) The method of claim 21, wherein the solubility of the selected portions of the non-chemically amplified photoresist layer is promoted by the photoactive compound forming an acid.

25. (New) The method of claim 24, wherein the acid is a carbonyl acid.

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26. (New) The method of claim 21, wherein the developer-soluble resin is produced through a free radical polymerization process using a component selected from the group consisting of vinyl acid, vinyl phenol, and vinyl phenol substitutes.

27. (New) The method of claim 21, wherein the non-chemically amplified photoresist layer does not include a photo-acid generator (PAG).

28. (New) The method of claim 27, further comprising:

etching portions of the layer underlying the exposed portions of the non-chemically amplified photoresist layer; and

etching a remaining portion of the non-chemically amplified photoresist layer to produce a patterned layer having one or more features, at least one of the features having a critical dimension of approximately 15 nanometers.

29. (New) The method of claim 28, wherein the at least one feature has a line wide roughness of less than 2 nanometers.

30. (New) A non-chemically amplified photoresist comprising:

a resin that is soluble in a developer; and

a photoactive compound, the photoactive compound distributed within the non-chemically amplified photoresist, the photoactive compound to promote solubility of a selected portion of the non-chemically amplified photoresist exposed to an extreme ultraviolet light source and to inhibit solubility of an unexposed portion of the non-chemically amplified photoresist.

31. (New) The non-chemically amplified photoresist of claim 30, wherein the resin comprises a polyhydroxystyrene-based compound.

32. (New) The non-chemically amplified photoresist of claim 30, wherein the solubility of the selected portion of the non-chemically amplified photoresist is promoted by the photoactive compound forming an acid.
33. (New) The non-chemically amplified photoresist of claim 32, wherein the photoactive compound comprises a phenyl group.
34. (New) The non-chemically amplified photoresist of claim 32, wherein the acid is a carbonyl acid.
35. (New) The non-chemically amplified photoresist of claim 30, wherein the resin is produced through a free radical polymerization process using a component selected from the group consisting of vinyl acid, vinyl phenol, and vinyl phenol substitutes.